

GPT12-X Ultra

Multi-Year LTE-M/NB-IoT GNSS Asset Tracker for Unpowered Industrial Assets

Sealed, maintenance-free asset tracker designed for trailers, containers, pallets, RTIs and remote equipment where external power is unavailable.



LTE-M /
NB-IoT



Multi-GNSS +
LBS fallback



Fixed internal
5000mAh Li-MnO₂
primary battery



IP67 sealed
enclosure



3-5 year typical
low-frequency
deployment



Motion +
light sensing

FRONT



BACK



DIMENSIONS



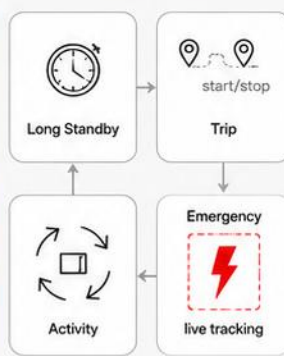
UNDER-TRAILER INSTALLATION



WAREHOUSE & PALLET TRACKING



FOUR SMART MODES



EASY 3-STEP INSTALLATION

- 1 Open back cover & insert Nano-SIM
- 2 Press power button to turn on
- 3 Press-to-adhere at target spot and confirm on mobile app



DESIGNED FOR



Trailers



Containers



Pallets / RTIs



Remote Equipment

Why GPT12-X Ultra Exists

Industrial assets create a different tracking challenge: they often move intermittently, remain idle for long periods and have no practical power source. Traditional vehicle trackers require wiring. Rechargeable devices increase maintenance. GPT12-X Ultra is designed specifically for these low-power, long-life deployments.



Traditional Approach	GPT12-X Ultra
Requires wiring or regular charging	Wireless deployment with a fixed primary battery
Higher maintenance burden	Sealed configuration reduces service needs
Continuous tracking drains power	Scheduled and event-driven reporting conserves energy
Less suitable for idle assets	Optimized for low-frequency check-ins and alert-based wake-ups



Low-Power Architecture

PSM, eDRX and optimized reporting profiles support long deployment cycles.



Event Awareness

Motion and light sensing help detect movement, handling and tamper events.



Industrial Protection

IP67 sealed enclosure supports demanding outdoor environments.



Platform Flexibility

Suitable for EELINK platform deployment or customer backend integration.

ENGINEERING ARCHITECTURE

GPT12-X Ultra combines low-power cellular communication, GNSS positioning and event-based sensing in a sealed industrial package.



1. nRF9161 SiP

Integrated LTE-M / NB-IoT, MCU and security platform.



2. GNSS Positioning

GPS / GLONASS / BeiDou / Galileo / QZSS support.



3. LBS Fallback

Useful when satellite reception is temporarily limited.



4. Motion Detection

3-axis accelerometer detects asset movement and handling.



5. Light Sensor

Supports tamper/open-event detection logic.



6. Power Optimization

Engineered for long-life sleep and wake cycles.

Power Management Logic



Sleep



Wake Event



GNSS Fix



LTE Upload



Sleep

GPT12-X ULTRA



DIMENSIONS

FRONT



56.0 mm
2.20 in

BACK



SIDE



97.0 mm
3.82 in

12.0 mm
0.47 in



Battery performance depends on reporting interval, network quality, GNSS acquisition time, temperature and event frequency.

Applications & OEM / ODM

Application Fit

Application	Why GPT12-X Ultra Fits
 Trailer Tracking	Long-life visibility for unpowered fleet assets.
 Container Visibility	Periodic location, motion and tamper awareness.
 Pallets / RTIs	Asset-level deployment with low maintenance needs.
 Remote Equipment	Outdoor industrial assets requiring periodic check-ins.



OEM / ODM Support

Support Area	Typical Scope
 Firmware configuration	Reporting profiles, alarms and behavior logic.
 Protocol integration	Customer platform integration and backend workflows.
 Branding / labeling	Private-label and project-specific identification.
 Packaging	Program-specific packaging and document sets.
 Deployment support	Pilot setup and volume-deployment planning.

Recommended Next-Step Documents

 Technical Datasheet

 Installation Guide

 Battery Life Guide

 Integration Guide